



**National Pollutant Discharge Elimination System
 GENERAL PERMIT FACT SHEET for
 Wastewater Discharges from Sand, Gravel,
 Dimension Stone or Crushed Stone Operations
 NPDES Permit No. ING490000
 October 27, 2015**

Indiana Department of Environmental Management

Office of Water Quality
 100 North Senate Avenue, IGCN Room 1255
 Indianapolis, Indiana 46204
www.idem.IN.gov

Existing Permit Information:	<u>Permit Number:</u> Existing facilities under 327 IAC 15-12 have general permit tracking numbers using the following format: ING490xxx (to be retained). <u>Expiration Date:</u> Under 327 IAC 15-12, each permitted facility has a unique expiration date based upon five years from when coverage commences. Under this general permit all permitted facilities will have the same expiration date.
Source Location:	State-wide
Receiving Streams:	All waters of the state of Indiana, except for Outstanding State Resource Waters and Outstanding National Resource Waters
Proposed Action:	New administrative NPDES general permit to replace existing NPDES general permit-by-rule (327 IAC 15-12)
Source Category	NPDES Minor – Industrial
Contacts:	Name: C. Anne Burget or Catherine Hess Contact Information: Cburget@idem.in.gov or chess@idem.in.gov Telephone: (317) 234-8745 or (317) 232-8704

The Federal Water Pollution Control Act (also referred to as The Clean Water Act (CWA) (33 U.S.C. 1251 et seq.), which was enacted in 1972, provides that the discharge of pollutants to the waters of the United States from any point source is unlawful, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The primary condition determining eligibility for this permit is ensuring that the discharge consists of only wastewater from sedimentation treatment basins from Sand, Gravel, Dimension Stone, and Crushed Stone Operations. Dischargers who meet the eligibility requirements may seek coverage under this NPDES general permit, instead of applying for an individual NPDES permit.

Development of a Fact Sheet for NPDES permits is required by Title 40 of the Code of Federal Regulations, Section 124.8 and 124.56. This document fulfills the requirements established in those regulations by providing the information necessary to inform the public of actions proposed by the Indiana Department of Environmental Management (IDEM) as outlined in 40 CFR 122.28 and 327 IAC 5-3-8(b).

A. Description of General Permit Category:

The purpose of this general permit is to regulate the wastewater discharges from sand, gravel, dimension stone, and crushed stone operations which utilize sedimentation basin treatment for pit dewatering, channel machines, broaching, jet piercing, scrubber water from wet scrubbers used for air pollution control, dust suppression spray water, wash water from spray bars for final screening operations, and noncontact cooling water for cooling of crusher bearings, drills, saws, dryers, pumps, and air compressors.

Sedimentation basins are settling ponds with a controlled water release structure used to collect and store sediment produced by resource extraction activities. A sedimentation basin can be constructed by excavation or by placing an earthen embankment across a low area or drainage swale. The basin detains sediment-laden runoff long enough to allow most of the sediment to settle out. Henceforth in this document these discharges will be referred to as sedimentation treatment basin discharges.

NPDES general permits are developed and issued to cover multiple facilities engaged in the same process category instead of an individual facility within the State of Indiana. IDEM first developed a general NPDES permit-by-rule (327 IAC 15-12) for quarry sedimentation treatment basin discharges in 1994. As a result of statutory changes to Indiana law in 2011, IDEM is now changing its method of administering NPDES general permits by changing from a permit-by-rule format to an administrative format which utilizes a "master general permit" (EPA terminology) which will be renewed and reevaluated on a five-year interval. Persons who seek coverage under this master general permit will continue to be assigned permit tracking numbers beginning with "ING49" but coverage under the general permit will be limited to the permit term established in the master general permit once it is issued.

These discharges are similar and require generally the same effluent limitations and monitoring requirements. As of October 2015, there are approximately 93 facilities which are currently regulated under 327 IAC 15-12. However the discharges typically do not occur on a daily basis. Since the permit requirements for all of these discharges are similar and because of the number of such dischargers, it is the opinion of IDEM that this category of sources is controlled more appropriately under a NPDES general permit. These discharges are similar in that they:

- 1) are comprised solely of wastewater from sedimentation treatment basins at sites involved with the mining and processing of sand, gravel, dimension stone or crushed stone; and

- 2) are generated on the quarry property by processes that include pit dewatering; channel machines; broaching; jet piercing; scrubber water from wet scrubbers used for air pollution control; dust suppression spray water; wash water from spray bars for final screening operations; and non-contact cooling water for cooling of crusher bearings, drills, saws, dryers, pumps, and air compressors.

B. Geographic area covered:

This general permit is intended to cover any discharge of wastewater from sedimentation treatment basins at sand, gravel, dimension stone and crushed stone operation sites within the boundaries of the state of Indiana, except as denoted herein.

C. Receiving waters:

This general permit will authorize discharges to all surface waters of the State of Indiana, except for Outstanding State Resource Waters (OSRWs) and Outstanding National Resource Waters (ONRWs). Direct dischargers to OSRWs and ONRWs are required to obtain an individual NPDES permit to regulate their discharges.

D. Eligibility

Discharges covered under this general permit will be from sand, gravel, dimension stone, and crushed stone quarries with discharges solely comprised of wastewater from sedimentation treatment basins. This general permit contains certain specific exclusions from coverage which are denoted in Section 1.3 of the permit. In such instances the person will be required to apply for an individual NPDES permit.

The following discharges are not authorized by this permit:

- 1) direct discharges into waters that are designated as an ONRW defined at IC 13-11-2-149.5 or an OSRW defined at IC 13-11-2-149.6 and listed at 327 IAC 2-1.3-3(d);
- 2) discharges to a receiving stream when the discharge results in an increase in the ambient concentration of a pollutant which contributes to the impairment of the receiving stream for that pollutant as identified on the current 303(d) list of impaired waters; and
- 3) discharges containing water treatment additives (WTAs) which have not received prior written approval from IDEM for the specific additive, use, and dosage at the particular facility for which the Notice of Intent (NOI) is submitted;
- 4) discharges from crushed stone operations utilizing flotation agents to remove impurities from marble or other carbonaceous rock. The flotation agents include organic amines; fatty acids; and pine oils;
- 5) industrial sand operations utilizing:
 - a) acid flotation to effect removal of iron oxide and ilmenite impurities;
 - b) alkaline flotation to remove aluminate bearing materials; and
 - c) hydrofluoric acid flotation for removal of feldspar;

- 6) industrial sand operations utilizing the acid leaching process. The acid leaching process pertains to the removal of iron from feldspathic sand for use in glass manufacturing; and
- 7) storm water discharges associated with construction or industrial activity. If the storm water runoff at the quarry flows into the sediment treatment basin, then such discharges are permitted because the resulting outfall is covered by this general permit. Otherwise, any discharges of storm water runoff from a quarry operation must either be covered by an individual NPDES permit or by the general permit for storm water discharges associated with industrial activity.

E. Application for Coverage:

This general permit proposes to provide coverage for any quarry with discharges composed entirely of sedimentation basin treatment wastewater from Sand, Gravel, Dimension Stone, and Crushed Stone operations which are not precluded from general permit coverage and agree to be regulated under the terms of the general permit.

Each discharger seeking coverage under this general permit must submit a Notice of Intent (NOI) form. Federal regulations found in 40 CFR 122.21(a) exclude persons covered by general permits from requirements to submit an application for an individual permit. NOI requirements are intended to establish a mechanism that can be used to establish a clear accounting of the number of permittees covered by the general permit, the identities, locations, mailing addresses, and nature of the discharges to be covered by the permit.

Applicants must obtain written IDEM approval for any wastewater treatment additive (WTA) prior to its use with the water that is to be discharged under this permit. Documentation of this IDEM-approval must be submitted with the Notice of Intent (NOI) when applying for coverage under this general permit. The necessary form and complete instructions are included in State Form 50000. A separate form must be submitted for each water treatment additive that the facility uses or plans to use.

F. Antidegradation Evaluation

327 IAC 2-1.3 outlines the state's Antidegradation Standards and Implementation Procedures. The Tier 1 antidegradation standard found in 327 IAC 2-1.3-3(a) applies to all surface waters of the state regardless of their existing water quality. Based on this standard, for all surface waters of the state, existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. IDEM implements the Tier 1 antidegradation standard by requiring NPDES permits to contain effluent limits and best management practices for regulated pollutants that ensure the narrative and numeric water quality criteria applicable to the designated use are achieved in the water and any designated use of the downstream water is maintained and protected. Effluent limits for the following regulated pollutants are being included in this NPDES permit to satisfy the Tier 1 antidegradation standard: total suspended solids (TSS).

The Tier 2 antidegradation standard found in 327 IAC 2-1.3-3(b) applies to surface waters of the state where the existing quality for a parameter is better than the water quality criterion for that parameter established in 327 IAC 2-1-6 and 327 IAC 2-1.5. These surface waters are considered high quality for the parameter and this high quality shall be maintained and protected unless the commissioner finds that allowing a significant lowering of water quality is necessary and accommodates important social or economic development in the area in which the waters are located. IDEM implements the Tier 2 antidegradation standard for regulated pollutants with numeric water quality criteria quality adopted in or developed pursuant to 327 IAC 2-1 and 327 IAC 2-1.5 and utilizes the antidegradation implementation procedures in 327 IAC 2-1.3-5 and 2-1.3-6.

According to 327 IAC 2-1.3-1(b), the antidegradation implementation procedures in 327 IAC 2-1.3-5 and 2-1.3-6 apply to a proposed new or increased loading of a regulated pollutant to surface waters of the state from a deliberate activity subject to the Clean Water Act, including a change in process or operation that will result in a significant lowering of water quality. There are no regulated pollutants in the expected discharge from Sand, Gravel, Dimension Stone, and Crushed Stone operations that have numeric water quality criterion and therefore, the Tier 2 antidegradation standard does not apply to any new or existing discharge from Sand, Gravel, Dimension Stone, and Crushed Stone operations because the discharge cannot cause a significant lowering of water quality in the receiving stream.

The following antidegradation determination is based on 327 IAC 2-1.3. The effluent limits in the general permit for Discharges from Sand, Gravel, Dimension Stone and Crushed Stone Operations are based on the best professional judgment of the best available treatment in accordance with 327 IAC 5-5-2 and Indiana water quality standards. Indiana does not have a numeric water quality standard for TSS. The NPDES permit does not propose to establish a new or increased loading of a regulated pollutant with numeric water quality criteria; therefore, the Antidegradation Implementation Procedures in 327 IAC 2-1.3-5 and 2-1.3-6 do not apply to the permitted discharges.

G. When to Apply

All dischargers desiring coverage under this general permit must timely submit a Notice of Intent (NOI). The current NPDES general permit-by-rule (327 IAC 15-12) allows an NOI to be filed at least fifteen (15) days prior to the commencement of the proposed activity. Under the terms and conditions of this general permit, appropriate submission time frames depending upon the situation of the discharger are proposed (See Section 4.0 of the general permit).:

H. Permit Conditions:

1) Narrative Water Quality Based Limits

The narrative water quality standards contained in 327 IAC 2-1-6(a)(1) (A)-(E) and 327 IAC 2-1.5-8 have been included in this general permit to ensure that the narrative water quality criteria are met.

2) Effluent Limits & Monitoring Requirements

Under State and Federal law and regulations 40 CFR 122.44 and 327 IAC 5, a discharge permit must establish effluent limitations equivalent to best available technology economically achievable (BAT). For some industry categories, such effluent limitations have already been established by the EPA. When an industrial discharge occurs on a continuous basis, the state and federal rules require that the effluent limitations and monitoring requirements be expressed as a monthly average and daily maximum. However, discharges from quarry operations are usually of an intermittent nature.

- a) Flow** is a standard parameter to be monitored in all NPDES permits. The general permit-by-rule required all permittees to report the daily maximum flows for each quarter. This general permit requires a slight increase in the monitoring frequency to once monthly. This parameter is required of all NPDES permits and is included in this permit in accordance with 327 IAC 5-2-13(a)(2).
- b) pH and Total Suspended Solids (TSS)** are included in the general permit to ensure that the discharge will not violate Indiana water quality standards. Limitations for both are at the same levels as were set for this category of coverage under general permit requirements specified in 327 IAC 15-12. The pH shall be no less than 6.0 nor greater than 9.0 standard units. TSS is limited to 30 mg/l as a weekly average. The expression of this effluent limitation as a weekly average is carried forward from the general permit by rule and is justifiable based upon the intermittent nature of the discharges from quarry operations. The monitoring frequency for Total Suspended Solids and pH is set at four (4) times annually, which shall occur a minimum of once per quarter.
- c) Total Flow.** An additional reporting requirement is being added to require the permittees to monitor and report the total flow value for the quarter in units of million gallons (mgal). This requirement has actually been a parameter listed on the Discharge Monitoring Report forms for all NPDES permittees for the past several years, and it is included to assist IDEM in properly assessing the annual permit operating fees set forth under IC 13-18-20.

3) Monitoring and Reporting Requirements

The monitoring frequency for Total Suspended Solids and pH is set at four (4) times annually, which shall occur at a minimum frequency of once per calendar quarter. Flow monitoring was previously set at once per quarter, but it is proposed to change this to a monthly requirement. Total flow must be calculated once quarterly.

The permittee is required to complete and submit federal DMRs and state MMRs to IDEM containing the results obtained during the previous monitoring period by the 28th day of the month following the monitoring period.

The permittee may choose to or may be required to enroll in the NetDMR program for the electronic submittal of the federal DMRs and the state MMR forms in lieu of submitting them via U.S. Mail. Once approved by IDEM, the permittee may use this process for submitting reports in lieu of submitting hard copies of the reports to IDEM.

I. Reporting Spills and Noncompliance

All persons covered by this general permit must monitor for, identify, and report adverse incidents. If a person covered by this general permit observes or is otherwise made aware of an adverse incident that may have resulted from a discharge, the person must notify IDEM by telephone at **(888) 233-7745**:

- immediately for incidents which pose a significant danger to human health or the environment,
- as soon as possible but within two (2) hours of discovery for any adverse incidents resulting in death or acute injury or illness to animals or humans (see 327 IAC 2-6.1), and
- within 24 hours of the person becoming aware of the adverse incident for any other adverse incidents not listed above.

The permittee shall also submit a written report to IDEM within 5 days of the permittee becoming aware of the incident and may be submitted by U.S. Mail, by fax, or by email (such reports must be sent to: wwreports@idem.IN.gov).

Spills from the permitted facility meeting the definition of a spill under 327 IAC 2-6.1-4(15), the applicability requirements of 327 IAC 2-6.1-1, and the Reportable Spills requirements of 327 IAC 2-6.1-5 (other than those meeting an exclusion under 327 IAC 2-6.1-3 or the criteria outlined below) are subject to the Reporting Responsibilities of 327 IAC 2-6.1-7.

It should be noted that the reporting requirements of 327 IAC 2-6.1 do not apply to those discharges or exceedances that are under the jurisdiction of an applicable permit when the substance in question is covered by the permit and death or acute injury or illness to animals or humans does not occur. In order for a discharge or exceedance to be under the jurisdiction of this NPDES permit, the substance in question (a) must have been discharged in the normal course of operation from an

outfall listed in this permit, and (b) must have been discharged from an outfall for which the permittee has authorization to discharge that substance.

J. Fees

In accordance with IC 13-18-20-12, any application for a new permit, renewal of a permit, modification of a permit, or variance from a permit requirement must be accompanied by an application fee, which is currently \$50.00. Once approved for coverage under a general permit, the permittee is also subject to annual operating fees. These annual fees are set by statute (IC 13-18-20).

K. Reopening Clause

This general permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing to include any applicable effluent limitation or standard issued or approved under 301(b)(2)(C),(D) and (E), 304 (b)(2), and 307(a)(2) of the Clean Water Act, when the effluent limitation or standard so issued or approved:

- a) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) controls any pollutant not limited in the permit.

L. Permit Term

This general permit is proposed to be in effect for a five-year term.

M. Forms, References, and Guidance Documents

The IDEM website will contain information about each of the NPDES general permits, including the issued permit(s), Notice of Intent forms, Notice of Termination Forms, State Form 50000 (for applying for approval of water treatment additives) and helpful reference documents to assist the regulated community and the general public.

This web page is still in development as of the date of this fact sheet.